



# D0 Status Report 6/6/2005

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Fermilab



# Data Taking for 5/23 – 5/29

| Day        | Delivered             | Recorded              | Eff. | Comments   |
|------------|-----------------------|-----------------------|------|--|
| 5/23 (Mon) | 1.57 pb <sup>-1</sup> | 1.39 pb <sup>-1</sup> | 88 % |  |
| 5/24 (Tue) | 2.07 pb <sup>-1</sup> | 1.71 pb <sup>-1</sup> | 83 % | 40 min downtime due to CTT x13<br>10 min downtime due to muon HV<br>15 min downtime due to FPD x12 |
| 5/25 (Wed) | 1.66 pb <sup>-1</sup> | 1.46 pb <sup>-1</sup> | 88 % | Luminosity special run   |
| 5/26 (Thu) | 2.60 pb <sup>-1</sup> | 2.31 pb <sup>-1</sup> | 89 % | Luminosity special run   |
| 5/27 (Fri) | 2.49 pb <sup>-1</sup> | 2.16 pb <sup>-1</sup> | 87 % | 30 min downtime due to CFT x52   |
| 5/28 (Sat) | 2.02 pb <sup>-1</sup> | 1.89 pb <sup>-1</sup> | 93 % |  |
| 5/29 (Sun) | 2.57 pb <sup>-1</sup> | 2.39 pb <sup>-1</sup> | 93 % |  |

|             |                       |                       |      |  |
|-------------|-----------------------|-----------------------|------|--|
| 5/23 – 5/29 | 15.0 pb <sup>-1</sup> | 13.3 pb <sup>-1</sup> | 89 % |  |
|-------------|-----------------------|-----------------------|------|--|



# Data Taking for 5/30 – 6/5

| Day        | Delivered             | Recorded              | Eff. | Comments   |
|------------|-----------------------|-----------------------|------|--|
| 5/30 (Mon) | 2.55 pb <sup>-1</sup> | 2.35 pb <sup>-1</sup> | 92 % |  |
| 5/31 (Tue) | 1.18 pb <sup>-1</sup> | 1.00 pb <sup>-1</sup> | 85 % | 15 min downtime due to PDT x3a   |
| 6/1 (Wed)  | 2.62 pb <sup>-1</sup> | 2.37 pb <sup>-1</sup> | 90 % |  |
| 6/2 (Thu)  | 3.08 pb <sup>-1</sup> | 2.70 pb <sup>-1</sup> | 87 % |  |
| 6/3 (Fri)  | 0.68 pb <sup>-1</sup> | pb <sup>-1</sup>      | %    | Luminosity reporting system is down<br>Controlled access to replace a BLS PS<br>Controlled access to fix a preamp PS |
| 6/4 (Sat)  | 1.44 pb <sup>-1</sup> | pb <sup>-1</sup>      | %    | Luminosity reporting system is down  |
| 6/5 (Sun)  | 2.09 pb <sup>-1</sup> | pb <sup>-1</sup>      | %    | Luminosity reporting system is down  |

|             |                       |                  |   |  |
|-------------|-----------------------|------------------|---|--|
| 5/30 – 6/25 | 13.6 pb <sup>-1</sup> | pb <sup>-1</sup> | % |  |
|-------------|-----------------------|------------------|---|--|



# Store Statistics

| Store | Init Lum | Duration | Delivered             | Recorded              | Eff. | Comments                            |
|-------|----------|----------|-----------------------|-----------------------|------|-------------------------------------|
| 4171  | 67E30    | 25 hours | 2.55 pb <sup>-1</sup> | 2.26 pb <sup>-1</sup> | 88 % |                                     |
| 4172  | 90E30    | 4 hours  | 1.06 pb <sup>-1</sup> | 0.84 pb <sup>-1</sup> | 79 % |                                     |
| 4175  | 59E30    | 23 hours | 2.22 pb <sup>-1</sup> | 1.98 pb <sup>-1</sup> | 89 % |                                     |
| 4176  | 81E30    | 24 hours | 2.99 pb <sup>-1</sup> | 2.67 pb <sup>-1</sup> | 89 % |                                     |
| 4178  | 86E30    | 29 hours | 3.59 pb <sup>-1</sup> | 3.19 pb <sup>-1</sup> | 89 % |                                     |
| 4179  | 77E30    | 19 hours | 2.56 pb <sup>-1</sup> | 2.39 pb <sup>-1</sup> | 93 % |                                     |
| 4181  | 75E30    | 28 hours | 2.92 pb <sup>-1</sup> | 2.70 pb <sup>-1</sup> | 92 % |                                     |
| 4185  | 90E30    | 27 hours | 3.44 pb <sup>-1</sup> | 3.01 pb <sup>-1</sup> | 88 % |                                     |
| 4187  | 97E30    | 25 hours | 3.76 pb <sup>-1</sup> | pb <sup>-1</sup>      | %    | Luminosity reporting system is down |
| 4193  | 85E30    | 31 hours | 3.54 pb <sup>-1</sup> | pb <sup>-1</sup>      | %    | Luminosity reporting system is down |



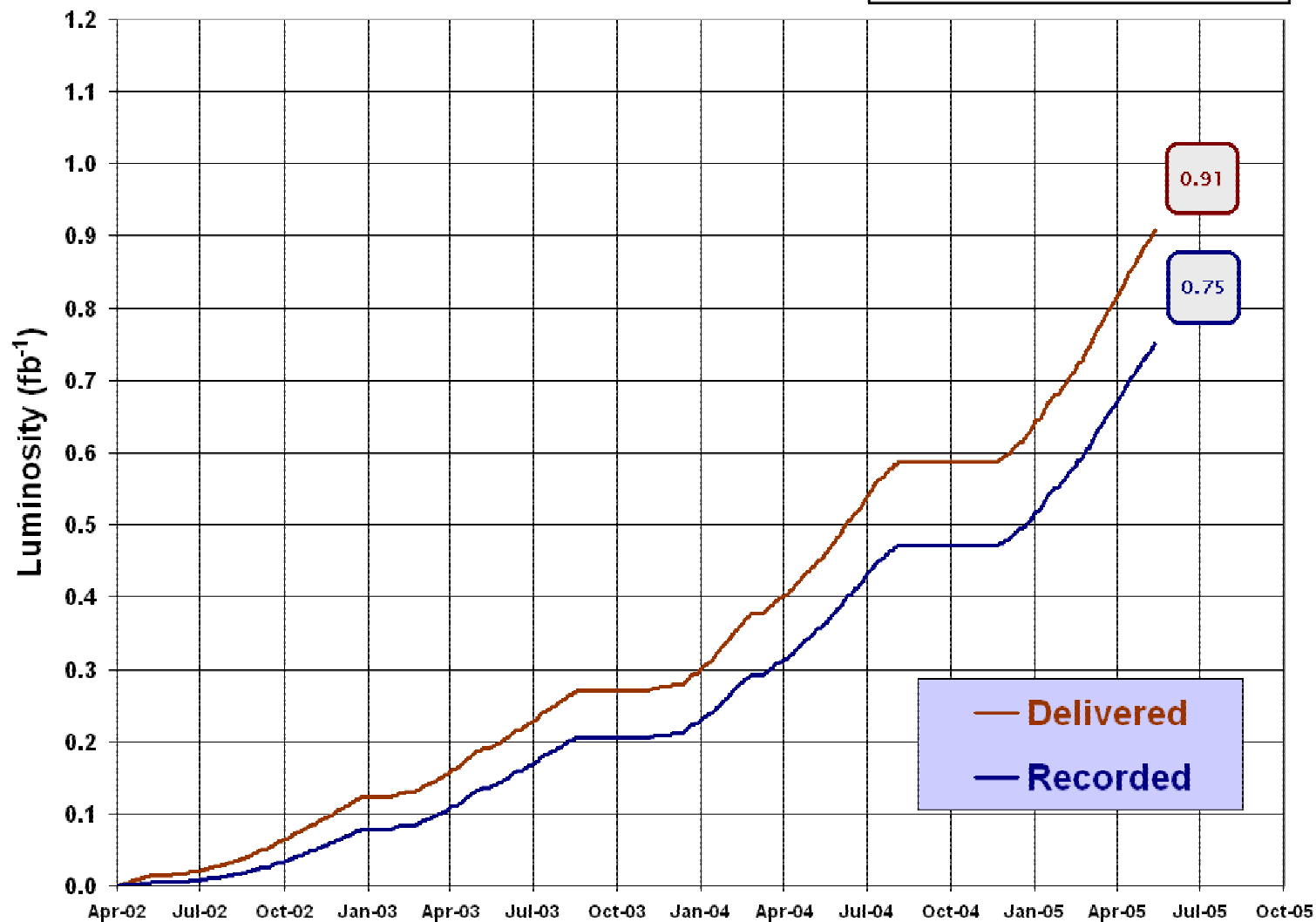
## Notable events of the week

- Delivered lumi surpassed  $900 \text{ pb}^{-1}$  on 5/27.
- Recorded lumi surpassed  $750 \text{ pb}^{-1}$  on 5/30.
- Delivered/Recorded lumi in May were  $66.3/58.1 \text{ pb}^{-1}$ : both 2<sup>nd</sup> best in Run II
- Reduced the number of control room shifters from 6 to 5.
  - Global Monitoring duties are now done by Shift Captain.
  - Five shifters are Captain, DAQ, CalMuo, SMT, and CFT.
- Downloaded and took data with v14 trigger successfully.
  - Meant for luminosity up to  $130 \text{ E}30$ .



## Run II Integrated Luminosity

19 April 2002 - 31 May 2005



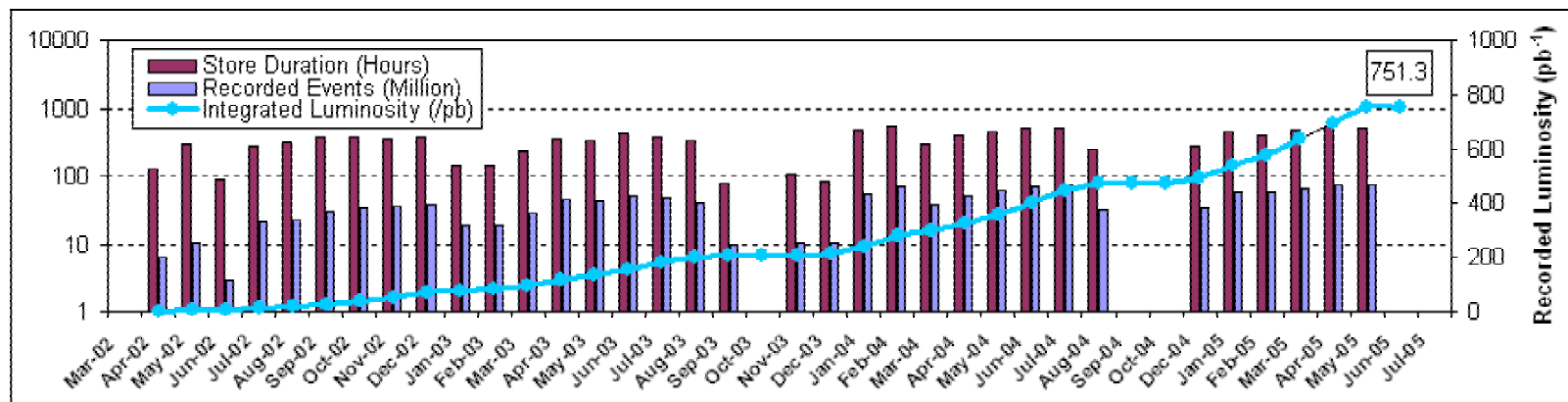
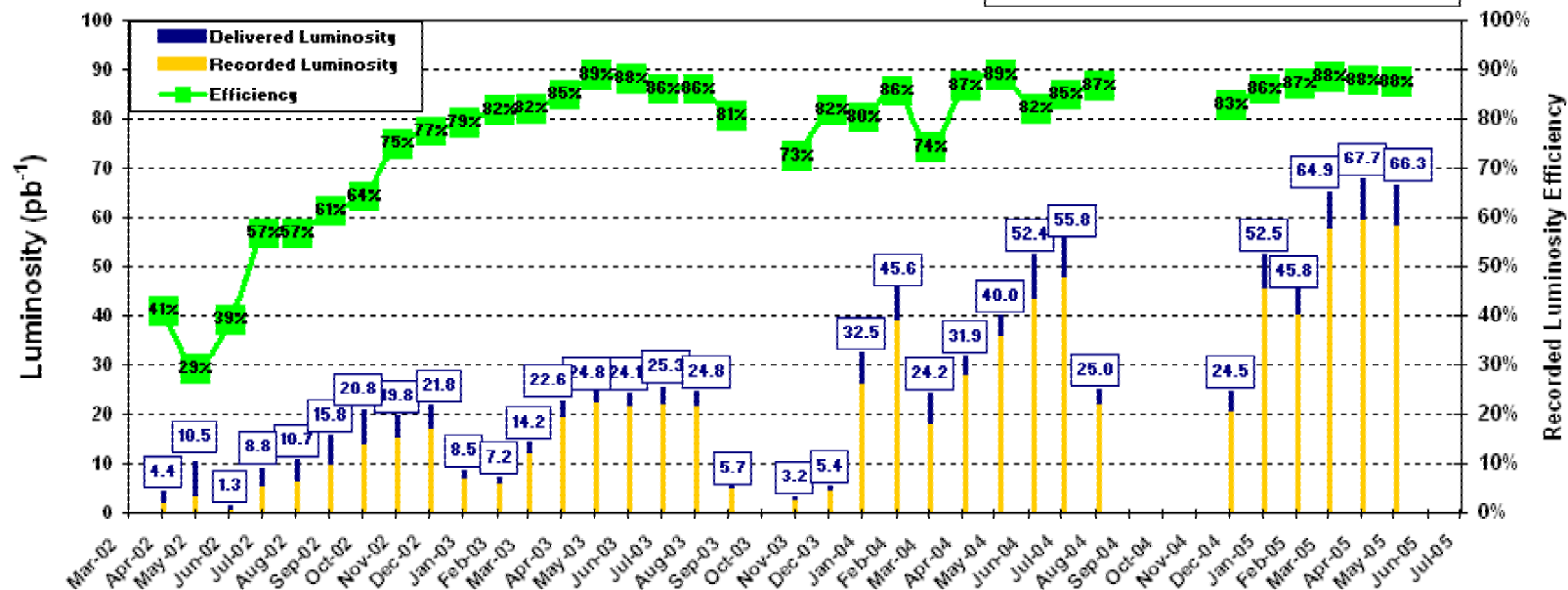
6 June 2005

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## Monthly Data Taking Summary

19 April 2002 - 31 May 2005



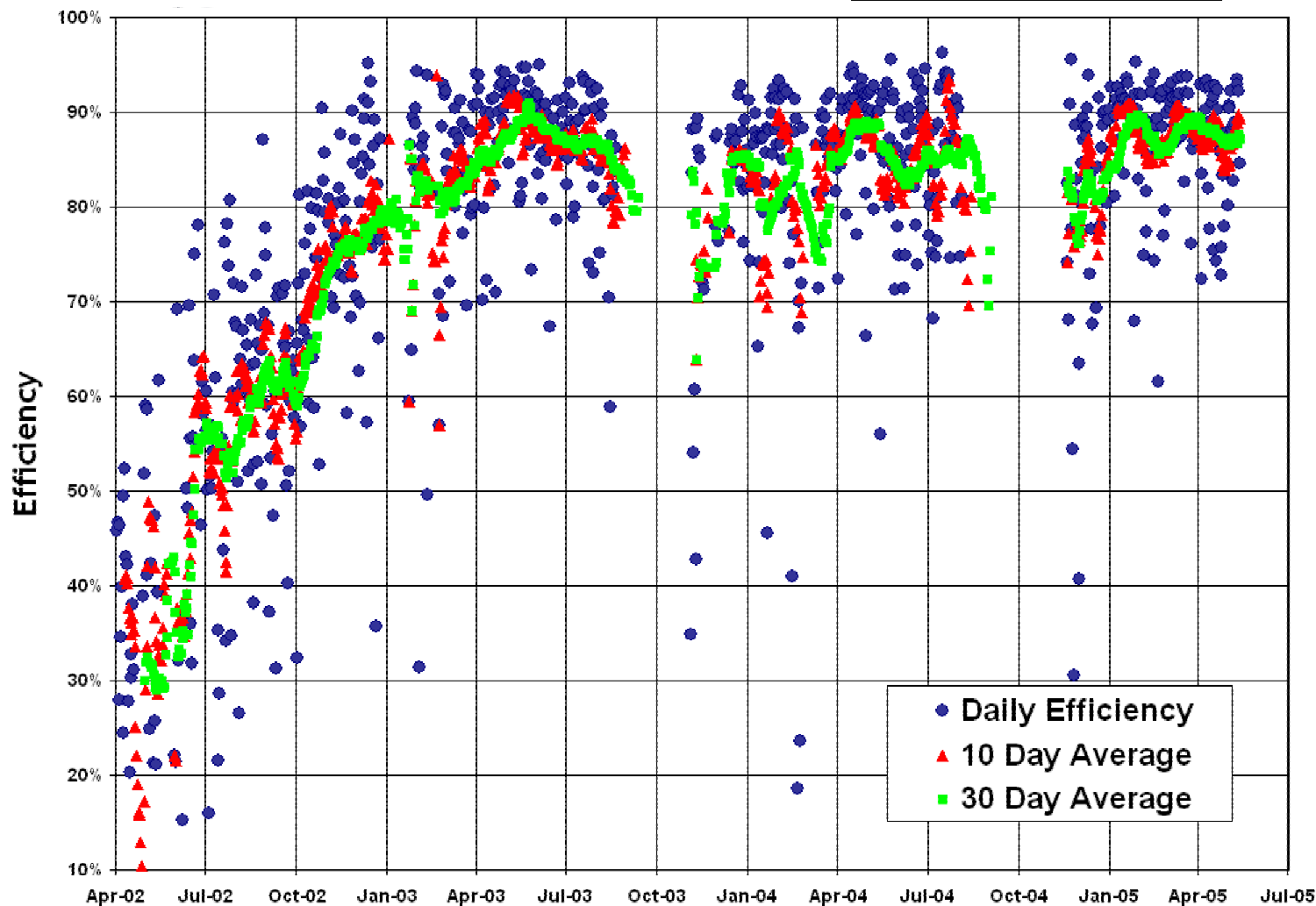
6 June 2005

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## Daily Data Taking Efficiency

19 April 2002 - 31 May 2005



6 June 2005

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# Notable events of the week

- Controlled access twice on 6/3 (Fri)
  - 1<sup>st</sup> Access
    - To replace a Calorimeter BLS supply
    - To swap an FPD AFE
    - To reseal CTT cables
    - To measure PDT low voltage PS ripples
  - 2<sup>nd</sup> access
    - To work on a dead Calorimeter preamp PS
    - Required opening the detector (2 hours to open and 3 hours to close)



# Summary

- We continue to take data with high efficiencies.
- We are getting ready for even higher luminosities.
- We will have our workshop in Vancouver next week.